



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT

Applicant: Marlon D. Cowart

Serial No.: 10/656,672

Filed: September 5, 2003

For: BENZIMIDAZOLES THAT ARE  
USEFUL IN TREATING SEXUAL  
DYSFUNCTION

Examiner: (not assigned)

Group Art Unit: 1642

Attorney Docket No.: 6789.US.O3

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Date of Deposit: March 15, 2004

  
Kathleen Boettcher Date

TRANSMITTAL LETTER

Commissioner for Patents  
Mail Stop DD  
P. O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Enclosed herewith is an Associate Power of Attorney for Marlon D. Cowart, for BENZIMIDAZOLES THAT ARE USEFUL IN TREATING SEXUAL DYSFUNCTION, the specification of which was filed on September 5, 2003, and received Serial No. 10/656,672.


Also enclosed are: Form PTO 1449 (in duplicate)w/34 (thirty-four) references  
Return-receipt postcard

The Commissioner is hereby authorized to charge any additional Filing Fees required under 37 CFR 1.16, as well as any patent application processing fees under 37 CFR 1.17 associated with this communication for which full payment has not been tendered, to Deposit Account No. 01-0025. A duplicate copy of this sheet is enclosed.

23492

ABBOTT LABORATORIES  
Phone: (847) 935,4314  
FAX: (847) 938-2623

Respectfully submitted,  
Marlon D. Cowart

  
Gabriella Ferrari-Dileo  
Registration No. P-55,174  
Attorney for Applicants



**PATENT**

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 3/15/04  
Kathleen Boettcher Date

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
Mail Stop DD  
P. O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This information disclosure statement is being filed before the mailing date of a first Office Action on the merits under 37 CFR § 1.97(b).

The Applicants submit herewith Form PTO 1449 listing the references cited for this Information Disclosure Statement.

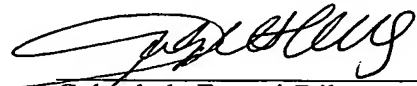
The Applicants respectfully request that the Examiner initial next to each reference listed on the enclosed Form PTO 1449 indicating that the Examiner has considered and made those references of record in this application and that a copy of the initialed Form PTO 1449 be returned to Applicants.

No charge is required for the submission of this Information Disclosure Statement under 37 C.F.R. § 1.97 (b). The Commissioner is hereby authorized to charge any additional filing fees required under 37 C.F.R. § 1.17 concerning this transmission, or to credit any overpayment to Deposit Account No. 01-0025.

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Respectfully submitted,  
Marlon D. Cowart

  
Gabryleda Ferrari-Dileo  
Registration No. P-55,174  
Attorney for Applicants



DATE: March 15, 2003

SHEET 1\_ of 3\_

FORM PTO - 1449 (Modified)

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE  
(Modified) PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

6789.US.03

SERIAL NO.

(not yet assigned)

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

APPLICANT(S)

M. D. Cowart, et al.

FILING DATE

September 5, 2003

GROUP

(not yet assigned)

(Use several sheets if necessary)

(37 CFR 1.98 (b))

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	INVENTOR	CLASS	SUB CLASS	FILING DATE
	A1	5,792,768	08/11/98	Kulagowski et al.			
	A2	3,472,854	10/14/69	Archer/Sterling			
	A3	5,714,498	02/03/98	Kulagowski et al.			
	A4	3,362,956	01/09/68	Archer			

## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLIC- ATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB CLASS	TRANS- LATION YES NO
	B1	98/31368	07/23/98	WO			
	B2	02/88093	07/11/02	WO			
	B3	00/23056	04/27/00	WO			
	B4	0 882 718	12/09/98	EP			
	B5	0 468 884	07/24/91	EP			
	B6	2 154 605	09/14/99	ES			X

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	C1	Andersson, K. et al., "Physiology of penile erection," Physiol. Rev. 75:191-236 (1995)
	C2	Bendele, A.M. et al., "Anti-Inflammatory Activity of Pergolide, a Dopamine Receptor Agonist," Journal of Pharmacology and Experimental Therapeutics 259(1):169-175 (1991)
	C3	Chen, F.F. et al., "Effects of dopamine, Apomorphine, -Hydroxybutyric Acid, Haloperidol and Pimozide on Reflex Bradycardia in Rats," Journal of Pharmacology and Experimental Therapeutics 214(2):427-432 (1980)
	C4	DeGroat, W. et al., "Neural Control of Penile Erection, in : Nervous control of urogenital system," Hardwood Academic Publishers, Chur, Switzerland, Vol. 3 (ed. Maggi, C.):467-524 (1993)
	C5	Dula, E. et al., "Efficacy and safety of fixed-dose and dose-optimization regimens of sublingual apomorphine versus placebo in men with erectile dysfunction," Urology 56:130-135 (2000)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(Form PTO 1449)

DATE: March 12, 2003

SHEET 2 of 3

## Form PTO - 1449 (Modified)

<b>FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE</b> (Modified) <b>PATENT AND TRADEMARK OFFICE</b>  <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b>  (Use several sheets if necessary)  (37 CFR 1.98 (b))	<b>ATTY. DOCKET NO.</b> 6789.US.03	<b>SERIAL NO.</b> (not yet assigned)
	<b>APPLICANT(S)</b> M. D. Cowart, et al.	
	<b>FILING DATE</b> September 5, 2003	<b>GROUP</b> (not yet assigned)

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	INVENTOR	CLASS	SUB CLASS	FILING DATE

## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLICA- TION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB CLASS	TRANS- LATION YES NO

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

C6	Hahn, R.A. et al., "Primate Cardiovascular Responses Mediated by Dopamine Receptors: Effects of N, N-di-n-Propyldopamine and LY171555," Journal of Pharmacology and Experimental therapeutics 229(1):132-138 (1984)
C7	Harris, M. C. et al., "Sequential N-Arylation of Primary Amines as a Route to Alkyldiarylamines," J. Org. Chem. 64:6019-6022 (1999)
C8	Hrib, N. J., et al., "The dopamine D <sub>4</sub> receptor: a controversial therapeutic target," Drugs of the Future 2000 25(6):587-611
C9	Koch, V. et al., "Chemistry of 3-Hydroxypyridien part 2: Synthesis of 5,6-Dihalo-3hydroxypyridines," Synthesis 499-501 (1990)
C10	Lissoni, et al., "Efficacy of bromocriptine in the treatment of metastatic breast cancer- and prostate cancer-related hyperprolactinemia," Neuroendocrinology Letters ISSN 21:405-408 (2000)
C11	Lynch, J.K. et al., "Efficient asymmetric synthesis of ABT-594; a potent, orally effective analgesic," Tetrahedron: Asymmetry 9:2791-2794 (1998)
C12	Melis, M et al., "Dopamine and Sexual Behavior," Neuroscience and Biobehavioral Reviews, 19(1):193-35 (1995)
C13	Milligan, G. et al., "Chimaeric G proteins: their potential use in drug discovery," Trends Pharmacol Sci 20:118-124 (1998)
C14	Missale, C. et al. "Dopamine receptors: from structure to function," Physiol Rev 78:189-225 (1998)
C15	Morales, A. et al., "Oral and Topical Treatment of Erectile Dysfunction: present and future," Urologic Clinics of North America, vol. 22:879-886 (1995)

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
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DATE: March 12, 2003

SHEET 3\_ of 3\_

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<b>FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE</b> (Modified) <b>PATENT AND TRADEMARK OFFICE</b>  <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b>  (Use several sheets if necessary)  (37 CFR 1.98 (b))	<b>ATTY. DOCKET NO.</b> <b>6789.US.03</b>	<b>SERIAL NO.</b> <b>(not yet assigned)</b>
	<b>APPLICANT(S)</b> <b>M. D. Cowart, et al.</b>	
	<b>FILING DATE</b> <b>September 5, 2003</b>	<b>GROUP</b> <b>(not yet assigned)</b>

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## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

C16	Moreland, RB, et al., "Prospectives for Pharmacotherapy of Male Erectile Dysfunction," Curr Opinion CPNS Invest Drugs, 2:283-302 (2000)
C17	Primus, R. et al., "Localization and characterization of dopamine D <sub>4</sub> binding sites in rat and human brain by use of the novel D <sub>4</sub> receptor-selective ligand [ <sup>3</sup> H]NGD 94-1," J. Pharmacol Exp. Ther 282:1020-1027 (1997)
C18	Suzuki, M. et al., "D <sub>3</sub> dopamine receptor mRNA is widely express in human brain," Brian Res 779:58-74 (1998)
C19	Vallone, D. et al., "Structure and function of dopamine receptors," Neurosci Biobehav. Rev. 24:125-132 (2000)
C20	Wagaw, S. et al., "The Synthesis of Aminopyridines: A Method Employing Palladium-Catalyzed Carbon-Nitrogen Bond Formation," J. Org. Chem 61:7240-7241 (1996)
C21	Yang B. et al., "Palladium-catalyzed amination of aryl halides and sulfonates," Journal of Organometallic Chemistry 576:125-146 (1999)
C22	Bevilacqua et al., "Pharmacology for erectile dustfunction" TIPS 21:484-489(2000)
C23	Shvedov et al., "Catalytic alkylolation of amines with alcohols", Zhurnal Organicheskoi Khimii 6(9): 1883-1840 (1970)
C24	Pugsley et al., "The discovery of PD89211 and related compounds: selective dopamine D4 receptor antagonists, "Progress in Neuro-Psychopharmacology & biological Psychiatry 26(2):219-226 (2002)

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